

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claims 1-15 cancelled.

16. (New) A method for performing a safety analysis in a system of a motor vehicle, the system including a plurality of components linked by communication relationships, the components and the communication relationships forming a functional structure of the system, the method comprising:

determining errors as a function of the functional structure; and

analyzing error dependencies with respect to the functional structure.

17. (New) The method as recited in claim 16, wherein the determining errors step includes tracking the error dependencies in the functional structure to generate error paths, global effects of the errors being determined as ends of the error paths.

18. (New) The method as recited in claim 16, wherein the determining errors step includes tracking the error dependencies in the functional structure to generate error paths, global effects of the errors being determined and weighted as ends of the error paths.

19. (New) The method as recited in claim 18, wherein the global effects are weighted by determining at least one safety level.

20. (New) The method as recited in claim 16, further comprising:

determining errors which cause a malfunction of a component or a communication relationship.

21. (New) The method as recited in claim 17, further comprising:

assigning malfunctions of a component or a communication relationship to the global effects.

22. (New) The method as recited in claim 16, further comprising:

determining measures for at least one of error detection and error control.

23. (New) The method as recited in claim 17, further comprising:

expanding the functional structure so that at least one of the global effects and a malfunction of a component or a communication relationship, are taken into account.

24. (New) The method as recited in claim 16, further comprising:

expanding the functional structure in such a way that measures are included for at least one of error detection and error control.

25. (New) A method for achieving a preselectable safety level in a system in a motor vehicle, the system including a plurality of components linked by communication relationships, the components and the communication relationships forming a functional structure of the system, the method comprising:

determining errors as a function of the functional structure;

analyzing error dependencies with respect to the functional structure;

tracking the error dependencies in the functional structure;

generating error paths;

determining global effects of the errors;

weighting the global effects as a function of a selected safety level;

determining errors which cause a malfunction of a component or a communication relationship;

assigning the malfunction of a component or a communication relationship to the global effects;

determining measures for at least one of error detection and error control;

determining an achievable safety level and comparing the determined safety level with the selected safety level; and

restarting the method at the tracking step as a function of the comparison until achieving the safety level.

26. (New) The method as recited in claim 25, further comprising:

documenting of the functional structure.

27. (New) The method as recited in claim 16, further comprising:

representing the functional structure as a CARTRONIC® functional structure using UML.

28. (New) A computer system, the computer system programmed for performing a safety analysis of a system of a motor vehicle, the system of the motor vehicle

including a plurality of components linked by communication relationships, the components and the communication relationships forming a function structure of the steps, the computer system configured to perform the steps of:

- determining errors as a function of the functional structure; and

- analyzing error dependencies with respect to the functional structure.

29. (New) A computer program for performing a safety analysis of a system of a motor vehicle, the system of the motor vehicle including a plurality of components linked by communication relationships, the components and the communication relationships forming a function structure of the steps, the computer program, when executed by a computer system, causing the computer system to perform the steps of:

- determining errors as a function of the functional structure; and

- analyzing error dependencies with respect to the functional structure.

30. (New) A storage device storing computer program for performing a safety analysis of a system of a motor vehicle, the system of the motor vehicle including a plurality of components linked by communication relationships, the components and the communication relationships forming a function structure of the steps, the computer program, when executed by a computer, causing the computer to perform the steps of:

- determining errors as a function of the functional structure; and

- analyzing error dependencies with respect to the functional structure.